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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/593,178	06/13/2000	Veselin Brankovic	450103-02669	5448
20999	7590	08/24/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			TRINH, SONNY	
			ART UNIT	PAPER NUMBER

2687

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/593,178

Applicant(s)

BRANKOVIC ET AL.

Examiner

Sonny TRINH

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-33, 52-55 and 57-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-33, 52-55 and 57-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06/02/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

CONTINUED EXAMINATION UNDER 37 CFR 1.114 AFTER ALLOWANCE OR QUAYLE ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 06/02/05 has been entered.

Allowable Subject Matter

2. The indicated allowability of claims 22-33, 52-55, and 57-60 is withdrawn in view of the newly interpretation of previous reference(s) to Shoobridge et al. (U.S. Patent Number 6,326,926). Rejections based on the newly cited reference(s) follow.

Specification

3. **Claims 22, 26, 52** are objected to because of the following informalities: Claims 22, 26, and 52 recite the limitation "...there is no hand-over between public access servers.." which is not an absolute limitation. Since the specification on page 7 (last line) specifies that "...they **do not necessary** support handover..." (emphasis added), Examiner interprets this limitation as an open ended limitation (i.e. handover is not necessary unless the system requires it to do so).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 22-28, 30-33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge et al. (U.S. Patent Number 6,326,926).

Regarding **claim 22**, with reference to figure 1 and its description (column 4 line 66 to column 5 line 63), Shoobridge discloses a wireless transmission system, comprising a plurality of public access servers (figure 1, access point 24a, 24b) and at least one mobile terminal (36), wherein the mobile terminal is designed to upload/download content from one of said public access servers by means of a wireless transmission (see figure 1) and the public download servers all operate with the same transmission frequency in a non-licensed band (column 1 line 63 to column 2 line 23 "ISM band"); each public access server downloads/uploads content to mobile terminals only within a small localized area (column 1, specifically lines 6-10 "short range").

It is noted here that according to one embodiment of the current application, specifically lines 33-34 page 10, "...a user is driving the car and during waiting for the green light he is downloading content of the interest, by using 60 GHz communications...", this does not exclude the user from trying to download the content

of the interest again at the next RED light if in fact the download is not finished before the light turned GREEN.

Shoobridge does not explicitly disclose that there is no hand-over between adjacent public access servers. In column 6 lines 48-52, Shoobridge discloses that "...upon roaming from one cell to another, the mobile communication unit 66 is configured to associated itself with a new access point 54 or directly with the host computer 60 within range...". This is interpreted as the mobile communication unit re-register itself with the new access point (i.e. "no handover").

As to **claims 23-24**, Shoobridge discloses the invention but does not disclose that the public server is free of charge or the upload / download is charged to the user of the mobile terminal etc. However, these are merely options and are up to the service providers to decide whether to charge or not to charge the customers and are obvious to one of ordinary skill in the art.

Regarding **claim 25**, since Shoobridge discloses that the system is an IEEE 802.11 standard (column 3 lines 16-31) which obviously has a very short range.

Regarding **claims 26-27**, these claims merely reflect the method claim of claims 22, 24 and are therefore rejected for the same reasons.

As to **claims 28, 30-33**, these claims merely add the intention of using the system in various environments and are obvious and well within the level of ordinary skill in the art.

5. **Claim 29** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge et al. (U.S. Patent Number 6,326,926) in view of Brankovic (hereinafter "Brankovic"; U.S. Patent Application Publication 2003/0013482 A1).

Regarding **claim 29**, Shoobridge discloses the invention but does not explicitly disclose that the non-licensed frequency band is a 60 GHz band.

In an analogous art, Brankovic teaches a dual band transceiver (abstract), Brankovic further teaches that license free such as ISM bands that operates in the 60 GHz ranges can be employed (column 1).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the license free (60 GHz), as taught by Brankovic, to the system of Shoobridge in order to allow the system to operate and the high frequency (high bandwidth) that is licensed-free. By using licensed free ranges, the provider can cut production cost and can pass the savings to consumers.

6. **Claims 52, 55, 57, 59-60** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge et al. (U.S. Patent Number 6,326,926) in view of Derneryd et al. (Derneryd; U.S. Patent Number 6,218,987).

Regarding claim 52, Shoobridge discloses the method of operating a wireless and a short range wireless connection in the same frequency (abstract) for downloading to the mobile terminal via the fixed hub (access point) within a small localized area (802.11 standard (see column 4 lines 47-65)), and no handover between the access point (please see the rejection of claim 22 above). However, Shoobridge does not disclose

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that the hub is provided with a wide angle beam antenna; and a hand-held mobile terminal provided with a narrow beam antenna.

In an analogous art, Derneryd discloses a radio antenna system with the wide angle beam at the base (column 8 lines 3-14) and the narrow beam antenna at the mobile station (column 3).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the narrow and wide angle beam, as taught by Derneryd into the system of Shoobridge in order to efficiently enable the communication between the base and the mobile device by concentrating the directivity between base and mobile.

Regarding **claim 55**, since Shoobridge discloses that the system is an IEEE 802.11 standard (column 3 lines 16-31) which obviously has a very short range.

As to **claims 57, 59-60**, these claims merely add the intention of using the system in various environments and are obvious and well within the level of ordinary skill in the art.

7. **Claim 53-54** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge et al. (U.S. Patent Number 6,326,926), Derneryd et al. (Derneryd; U.S. Patent Number 6,218,987) and in further view of Tresselt ("Tresselt"; U.S. Patent Number 4,414,550).

Regarding **claim 53**, the combination of Shoobridge and Derneryd discloses the invention but does not disclose that the fixed hub is provided with an antenna with a kidney shaped beam in cross-section.

In an analogous art, Tresselt discloses a low profile circular array antenna (abstract). Tresselt further discloses that the antenna can be steered to form a kidney shape cross pattern ("cardioid", figure 8, column 8).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the kidney-shape radiation pattern, as taught by Tresselt into the system of Shoobridge and Derneryd in order to eliminate possible interference(s) between mobile and the hub.

Regarding **claim 54**, Shoobridge teaches that said antenna can be mounted on a ceiling (column 2 lines 35-51), however, the combination of Shoobridge, Derneryd and Tresselt does not disclose that said kidney shaped beam has a local minimum level in said cross section in a direction opposing said ceiling. However, steering an antenna beam opposite to the ceiling is obvious to one of ordinary skill in the art. The motivation for steering the beam away from the ceiling is to cover the floor below, where users are likely to be located.

8. **Claim 58** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge et al. (U.S. Patent Number 6,326,926), Derneryd et al. (Derneryd; U.S. Patent Number 6,218,987) and in further view of Brankovic (hereinafter "Brankovic"; U.S. Patent Application Publication 2003/0013482 A1).

Regarding **claim 58**, the combination of Shoobridge and Derneryd discloses the invention but does not explicitly disclose that the non-licensed frequency band is a 60 GHZ band.

In an analogous art, Brankovic teaches a dual band transceiver (abstract), Brankovic further teaches that license free such as ISM bands that operates in the 60 GHZ ranges can be employed (column 1).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the license free (60 GHz), as taught by Brankovic, to the system of Shoobridge and Derneryd in order to allow the system to operate and the high frequency (high bandwidth) that is licensed-free. By using licensed free ranges, the provider can cut production cost and can pass the savings to consumers.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny TRINH whose telephone number is 571-272-7927. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester KINCAID can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SONNY TRINH
PRIMARY EXAMINER

8/12/05